

REMARKS

The present amendment is submitted in response to the Non-Final Office Action mailed November 23, 2007. Claims 1-13 are currently pending in the application. No new matter or issues are believed to be introduced by this amendment. In view of the remarks to follow, reconsideration and allowance of this application are respectfully requested.

35 U.S.C. §103(a)

Claim 1-3 and 6-13 were rejected under 35 U.S.C. §103(a) as being unpatentable over U.S. Patent Publication No. 2003/0091186 (Fontijn) in view of U.S. Patent No. 7,111,169 (Ripley).

It is respectfully submitted that Claims 1-3 and 6-13 are patentable over the cited references, alone and in combination, for at least the following reasons.

In the Office Action, the Examiner maintains, as per claim 1, that Fontijn teaches a record carrier (Figures 1, 4, block 4) for storing user data in sectors (par. 0022, i.e., initialization vector stored in each header or sub-header of each block sector). The Examiner concedes that Fontijn does not teach wherein said management information comprises an encryption indication information indicating that the user data stored in the associated sector are to be encrypted by a read-out device before being transmitted over a communication bus. The Examiner cites Ripley for curing this deficiency in Fontijn. Specifically, Ripley is cited for teaching storing a media key on a storage medium (column 5, lines 40-44) and that the media key may serve to encrypt content at the source

device before transmission to the destination device (column 5, lines 50-52). The Examiner further asserts that Ripley discusses that the source device determines if the content is subject to watermarking (column 6, lines 26-31, column 7, lines 20-23), and if the content is subject to a watermark, than encrypting the content before transmission on the bus or transmitted to its destination (column 6, lines 39-41, column 6, lines 55-58, column 7, lines 23-25).

Independent Claim 1 has been amended herein to better define Applicant's invention over Fontijn and Ripley, individually and in combination.

Claim 1 now recites limitations and/or features which are not disclosed by Fontijn and Ripley, individually and in combination. In particular, Applicant's presently amended independent claim 1 recites

1. (Currently Amended) Record carrier (10) for storing user data in sectors (S) and management information (M) associated with said sectors (S), wherein said management information (M) comprises an encryption flag indicating to a read-out device that the user data stored in the associated sector (S) are to be encrypted by the read-out device (2) before being transmitted over a communication bus (6).

It is respectfully submitted that Ripley does not teach an encryption flag indicating that the user data stored in the associated sector (S) are to be encrypted by a read-out device (2) before being transmitted over a communication bus (6).

As understood by the Applicants, the media key block, MKB, taught in Ripley, is provided to algorithms at the source and/or destination device to compute

a media key. In contrast to the encryption flag of the invention, **the MKB is not an encryption flag** that constitutes a form of meta-data for the purpose of informing a source device that an encryption operation needs is required (or not required) at the source **prior to** communicating that data on a bus to a destination device. It is noted that the encryption flag (meta-data) is read from the storage medium at the source and is utilized exclusively at the source. That is, the encryption flag does not get transmitted along with the stored data for the purpose of computing media keys or other encryption data, as taught in Ripley.

In Ripley, the MKB serves a wholly different purpose than the encryption flag of the invention. Specifically, the MKB is used in Ripley to **determine whether the source device 402 and/or destination device 404 are legitimate** (See Ripley at Col. 5, lines 44 – 46). It is noted that the purpose of the MKB of Ripley is not identical, but rather more analogous to the well-known methods and processes of symmetric key cryptography than that of the encryption flag of the invention. As is well known, symmetric key cryptography is a well known encryption system in which the sender and receiver of a message share a single, common key that is used to encrypt and decrypt the message.

In support of Applicant's assertion that the MKB taught in Ripley is more analogous to symmetric key cryptography, Applicant respectfully directs the Examiner's attention to Ripley at Col. 5, which states:

According to one implementation of the encryption/decryption scheme for this content copy protection system, a random number generator on the destination device 404 generates a random or sequential number (referred hereinafter as "nonce") and sends a copy of it to the

source device 402. The source device combines the nonce received from the destination device 404 with a previously calculated media key using a one-way function and returns the result (i.e., a bus key) to an encryption logic component in the source device 402. The one-way function is configured such that the bus key can be generated by inputting the media key and the nonce, however, determining the media key from the bus key and nonce is computationally infeasible. The destination device 404 also employs the one-way function to combine the previously calculated media key and the nonce to produce its own bus key to be used by a decryption logic component in the destination device 404. It should be noted that since the same one-way function is used by the source device 402 and destination device 404, **both source and destination devices 402 and 404 will generate the same bus key provided that same media key and nonce was used by both devices to generate the bus key.** In this manner, content from the storage media may be protected during transmission. After receiving and decrypting the content, the destination device 404 may then try to detect a watermark and access and/or process the content according to the restrictions corresponding to the watermark. [Emphasis Added]

As a further point of distinction, Applicants refer to the Examiner to his further assertion in the Office Action in which the Examiner states that Ripley also discusses that the source device determines if the content is subject to watermarking (column 6, lines 26-31, column 7, lines 20-23), and if the content is subject to a watermark, than encrypting the content before transmission on the bus or transmitted to its destination (column 6, lines 39-41, column 6, lines 55-58, column 7, lines 23-25).

Ripley teaches that the source device makes a determination regarding watermarking based on **the format of the content and not on meta-data (e.g., flags stored on the storage medium,** as taught by the invention. As a second point of distinction, Ripley is discussing watermarking and not encryption. Ripley teaches Therefore, in another embodiment of the invention, illustrated in FIG. 5, the source device 502 first determines if the data is subject to watermarking 510 **before bus-encrypting it** **512.** Such a determination might be made **based on the format of the content,** such as by determining whether it is a particular video format (e.g. DVD Video), etc.

Accordingly, it is believed that Applicant's Claim 1 recites patentable subject matter, and therefore, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of Claim 1 is respectfully requested.

Claims 2-3 and 6-7 depend from independent Claim 1 and therefore contain the limitations of Claim 1 and are believed to be in condition for allowance for at least the same reasons given for Claim 1 above. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of Claims 2-3 and 6-7 is respectfully requested.

Independent Claims 8-11 and 13 recite similar subject matter as Claim 1 and therefore contain the limitations of Claim 1. Hence, for at least the same reasons given for Claim 1, Claims 8-11 and 13 are believed to be allowable over Fontaijn and Ripley in any reasonable combination. Accordingly, withdrawal of the rejection under 35 U.S.C. §103(a) and allowance of Claims 8-11 and 13 is respectfully requested.

Claim 12 depends from independent Claim 11 and therefore contain the limitations of Claim 11 and are believed to be in condition for allowance for at least the same reasons given for Claim 11 above. Accordingly, withdrawal of the rejection under 35 U.S.C. §102(b) and allowance of Claim 12 is respectfully requested.

35 U.S.C. §103(a)

In the Office Action, Claim 4 was rejected under 35 U.S.C. §103(a) as being unpatentable over Fontaijn in view of U.S. Patent No. 6,378,072 – Collins.

Claim 4 depends from Claim 1 and therefore includes the limitations of Claim

1. Accordingly, for the same reasons given above for Claim 1, Claim 4 is believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claim 4 is respectfully requested.

35 U.S.C. §103(a)

In the Office Action, Claim 5 was rejected under 35 U.S.C. §103(a) as being unpatentable over Fontaijn in view of U.S. Patent Application No. 2003/0159037 – Taki et al.

Claim 5 depends from Claim 1 and therefore includes the limitations of Claim 1. Accordingly, for the same reasons given above for Claim 1, Claim 5 is believed to contain patentable subject matter. Accordingly, withdrawal of the rejections with respect to Claim 5 is respectfully requested.

Conclusion

In view of the foregoing amendments and remarks, it is respectfully submitted that all claims presently pending in the application, namely, Claims 1-13 are believed to be in condition for allowance and patentably distinguishable over the art of record.

If the Examiner should have any questions concerning this communication or feels that an interview would be helpful, the Examiner is requested to call Mr. Michael Belk, Esq. Intellectual Property Counsel, Philips Electronics North America, at 914-333-9643.

PATENT
Serial No. 10/566,510
Amendment in Reply to Non-Final Office Action of November 23, 2007
Confirmation No. 2131

Respectfully submitted,



Michael A. Scaturro
Reg. No. 51,356
Attorney for Applicant

Mailing Address:
Intellectual Property Counsel
Philips Electronics North America Corp.
P.O. Box 3001
345 Scarborough Road
Briarcliff Manor, New York 10510-8001